Title (en)

ELECTRO-HYDRAULIC BRAKE BOOSTER

Title (de)

ELEKTROHYDRAULISCHER BREMSKRAFTVERSTÄRKER

Title (fr)

SERVOFREIN ELECTROHYDRAULIQUE

Publication

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Application

EP 03812425 A 20030930

Priority

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- US 30783502 A 20021202

Abstract (en)

[origin: US6729450B1] A brake booster amplifies driver brake pedal input into an output force and travel for operating a master cylinder. A power unit builds and stores high pressure fluid to provide boost. Inlet and outlet solenoid valves regulate pressurized fluid to the amplifying mechanism. In one embodiment, a single boost chamber provides fluid pressure to operate the master cylinder and to provide a brake pressure indicative opposing force to driver input. One travel sensor monitors the position and movement of an input rod and piston, and a second travel sensor monitors the position and movement of an output piston. An ECU monitors system parameters and controls a motor pump, inlet and outlet valves and peripherals. In another embodiment, the opposing force to the brake pedal input is provided by a separate pressure fluid chamber located within and movable with the output piston. Boost chamber pressure and, optionally, output piston travel are monitored to provide a braking force indication. An ECU monitors system parameters including input travel and boost chamber pressure, and controls the inlet and outlet valves and peripherals.

IPC 1-7

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IPC 8 full level

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CPC (source: EP US)

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Cited by

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Designated contracting state (EPC)

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